AMENDMENT TO THE CLAIMS

Claims 13 and 15 have been amended. This listing of the claims will replace all prior versions, and listings, of claims in the application.

Listing of the claims:

What is claimed is:

1. (Original) A system for connecting a packet network with a circuit network comprising:

a module for receiving a packet-based signal and transcoding the packet-based signal creating a transcoded packet-based signal;

a module for receiving the transcoded packet-based signal, reassembling the signal creating a circuit-based signal, performing echo cancellation and transmitting the circuit-based signal to the circuit network; and

a module for sending the transcoded packet-based signal to the module for receiving the transcoded packet-based signal.

2. (Original) A system for connecting a circuit network with a packet network comprising:

a module for receiving a circuit-based signal and performing echo cancellation and packet adaptation, creating a packet-based signal;

a module for receiving the packet-based signal and transcoding the packet-based signal creating a transcoded packet-based signal and sending the transcoded packet-based signal to the packet network; and

a module for transmitting the packet-based signal to the module for receiving the packet-based signal.

3. (Original) A system for connecting a circuit network with a packet network, the system comprising:

a packet switch fabric;

a circuit network server having a first port for sending and receiving circuit-based signals with the circuit network, the circuit network server having a first at least one digital signal processor to perform packet adaptation and a second at least one digital signal processor which subsequent to the packet adaptation performs signal processing and a second port for sending and receiving packet-based signals having packets with the packet switch fabric; and

a packet network server having a first port for sending and receiving packet-based signals with the packet switch fabric and a second port for sending and receiving packet-based signals with the packet network;

wherein the packet switch fabric is capable of transferring packet-based signals among the packet network server and the circuit network server, and among the circuit network server and a second circuit network server.

4. (Original) A system according to claim 3 wherein, the signal processing performed on the second at least one digital signal processor is gateway signal processing.

5. (Original) A system according to claim 4 wherein, the gateway signal processing on the second at least one digital signal processor of the circuit network server is transcoding.

6. (Original) A system according to claim 4 wherein, the gateway signal processing on the second at least one digital signal processor of the circuit network server is echo cancellation.

7. (Original) A system according to claim 3 wherein, the packet switch fabric further comprises a switch for switching among the packet network server and the circuit network server.

8. (Original) A system according to claim 3 wherein, the packet switch fabric is a switching module.

9. (Original) A system according to claim 3 wherein, the packet switch fabric is a packet bus.

10. (Original) A system according to claim 3 wherein, the packet switch fabric is a cell bus.

11. (Original) A system according to claim 3 further comprising a signal processing server having a port for sending and receiving packet-based signals with the packet switch fabric, the signal processing server having a digital signal processor for performing signal processing on the packet-based signals;

wherein the packet switch fabric transfers packet-based signals to the signal processing server.

12. (Original) A system according to claim 11 wherein, the signal processing performed on the digital signal processor of the signal processing server is gateway signal processing.

13. (Currently Amended) A method for communicating a circuit-based signal as a packet-based signal, the method comprising:

receiving a circuit-based signal into a circuit network server;

performing echo cancellation on the circuit-based signal;

performing packet adaptation on the circuit-based signal forming a packet-based signal;

transferring the packet-based signal to a packet switch fabric;

transferring the packet-based signal from the packet switch fabric to a signal processing server;

transcoding the packet-based signal creating a transcoded packet-based signal;

directing the transcoded packet-based signal from the signal processing server to ~~the~~ a packet network server; and

sending the transcoded packet-based signal from the packet network server.

14. (Original) The method of claim 13 wherein, said step of directing comprises transferring the transcoded packet-based signal from the signal processing server to the packet switch fabric and transferring the transcoded packet-based signal from the packet switch fabric to the packet network server.

15. (Currently Amended) A system for connecting a circuit network with a packet network, the system comprising:

a packet switch fabric;

a circuit network server having a first port for sending and receiving circuit-based signals with the circuit network, the circuit network server having a first at least one digital signal processor to perform packet adaptation and a second at least one digital signal processor which subsequent to the packet adaptation performs signal processing and a second port for sending and receiving packet-based signals having packets with the packet switch fabric; and

a packet network server having a first port for sending and receiving packet-based signals with the packet switch fabric and a second port for sending and receiving packet-based signals with the packet network;

wherein the packet switch fabric transfers ~~is capable of transferring~~ packet-based signals among the packet network server and the circuit network server, and among the packet network server and a second packet network server.

16. (Original) A system according to claim 15 wherein, the packet switch fabric is a switching module.

17. (Original) A system according to claim 15 wherein, the packet switch fabric is a packet bus.

18. (Original) A system according to claim 15 wherein, the packet switch fabric is a cell bus.